in the form of distillation gas, Imvo gono over into the #is, and thus, finally, also the quantity of carbon which Hppe.rtahuul to the gasification into steam-air gas. Krom all tlu»so determinations one can obtain the combustible value, which the gas must intrinsically possess from the. fuel employed.

An example may serve the purpose of elucidating the train of thought. Example: Gas No. 2 in Table* (i evolved in a producer of the most modern construction had the composition C0a, 2-4 per cent.; CO, 29"4 per cent.; 01 It, :JT> per cniL ;
H, 12-8 per cent. ; 0, 0*20 per cent. ; N, 51:1 per cent.-: 100 per cuait.

(a) GAS VOLUME FOU 1 KILOCJUAMMK 0. In the gas carbonaceous gases are as under
CO* 2-4
CO 29-4
OH4 ;H>
Total carbona- - — — (If (\,lln . \v<w pnwmt, it. nhouitl IM» tlonhhnl ceous gas:
IJ5*4 in thin (rid? Komutla 2o|,
XO-M8 (^ibic Tnotrtj (/vWr Tabio).
19"()4 kiloijrraxnxncs ().

These give 100 cubic metres gas; therefore from 1 kilogramme C one obtains
1(i,n,,=«/>*2r» cubic metres ^an. Th«»
gas, therefore, appears to have been very well mimufuetured.

The composition of the amounts of gun which would ho obtained from 1 kilogramme G is ascertained by multiplying
5- 25 the results of the gas analysis by ' ; thus—
COa, 018 cubic metro+CO, 1"54 cubic meire+(!flj,CH9 cubic metre+H, 0*67 cubic metro+0» 01)1 cubic metre+N,
2*71 cubic metres=5*25 cubic metron.1

Now the amount of hydrogen derived from the distillation gases is to be estimated, for which the comluuttion method
1 II; the calculation in correctly Hot out, the Hum of tin* t%<'uut«uni»g must give 1 *86 cubic met re :
(0*13 COs-f I'M, CO + U'll), OH4wi-tJO).